REMARKS

Applicant has reviewed the Office Action mailed on September 27, 2005 as well as the art cited. Claim 2-5 and 8-9 has been amended. Claims 11-14 have been added. As a result, claims 1-14 are pending in this application.

Specification

The disclosure was objected to because of the following informalities: In paragraph [08], line 5, Examiner believed that the phrase "information on a permanent virtual connection" should be changed to "information for a permanent virtual connection." Applicant respectfully proposes that the Examiner meant to object to paragraph [18], line 5 rather than paragraph [08], line 5. As a result, paragraph [18] has been amended to overcome the objection.

Claim Objections

Claim 5 was objected to because of the following informalities: In claim 5, line 7, Examiner believed that the phrase "information on a permanent virtual connection" should be "information for a permanent virtual connection." Applicant respectfully asserts that Claim 5 has been corrected to overcome the objection.

Rejections Under 35 U.S.C. § 112

Claims 2-4, 8, 9 and 10 are rejected under 35 USC § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant respectfully traverses this rejection.

Claims 1-4

Claim 1 is directed to a method for establishing an end-to-end virtual circuit. The method involves establishing a permanent virtual circuit between customer premises equipment and a digital subscriber line access multiplexer and embedding information for a permanent virtual connection between a switch and a remote node in a packet transmitted over a static connection

in a network. The method further involves establishing a permanent virtual circuit between the switch and the remote node based on the embedded information.

In response to the Examiner's argument on page 3 of the Office Action, Applicant directs the Examiner to the following quotations from MPEP 2164.04 which states, in part:

> In order to make a [35 U.S.C. 112, first paragraph] rejection, the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993) (examiner must provide a reasonable explanation as to why the scope of protection provided by a claim is not adequately enabled by the disclosure).
>
> As stated by the court, "it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise, there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure." 439 F.2d at 224, 169 USPQ at 370.

(Emphasis added) Applicant respectfully asserts that the Examiner's argument on page 3 of the Office Action fails to meet the initial burden of explaining *why* the Examiner doubts the accuracy of claims 1-4. The Examiner simply states that it is *unclear*; a conclusory statement.

Further, Applicant respectfully contends that the passage cited by the Examiner on page 3 of the Office Action is enabling of claim 1. This passage, from paragraph [18] of the specification, is cited below:

> At block 204, the process embeds information on a permanent virtual connection between switch 108 and remote node 106 into a packet, e.g., an ATM cell for transmission over network 102. In one embodiment, the information that is embedded in the data packet is embedded in the destination address and includes slot, port, VPI and VCI information for the permanent virtual connection. At block 206, the process transmits the packet with embedded information over a switched virtual circuit through network 102. In one embodiment, this packet is sent over a static connection under the IISP protocol. At block 208, the process sets up the permanent virtual circuit between switch 108 and remote node 106 based on the embedded information. The method ends at block 210.

(Emphasis added) From the section identified above in the present application, Applicant respectfully contends that one of ordinary skill in the art would know how to set up the permanent virtual circuit using the embedded information, e.g., slot, port, VPI and VCI. Moreover, the limitation of claim 1 including "establishing a permanent virtual circuit between

the switch and the remote node based on the embedded information" is supported by paragraph [18]. Accordingly, it is respectfully requested that the rejection of claim 1 under 35 USC §112, first paragraph, be withdrawn.

Claims 2-4 ultimately depend from claim 1. Accordingly, it is respectfully requested that the rejection of claim 2-4 under 35 USC §112, first paragraph, be withdrawn for at least the reasons discussed above with respect to claim 1.

Claims 8, 9

Claims 8 and 9 have been amended to correct typographical errors with respect to dependency. Accordingly, it is respectfully requested that the rejection of claims 8 and 9 under 35 USC §112, first paragraph, be withdrawn.

Claim 10

Claim 10 is directed to a method for establishing an end-to-end virtual circuit. The method involves establishing a permanent virtual circuit between a digital subscriber line modem and a digital subscriber line access multiplexer, embedding at least slot, port, VPI and VCI information for a permanent virtual connection between a switch and a remote node in a packet, and transmitting the packet over a static connection in a data network between the digital subscriber line access multiplexer and the switch. The method further involves establishing a permanent virtual circuit between the switch and the remote node based on the at least slot, port, VPI and VCI information to complete the end-to-end connection.

Applicant refers the Examiner to the arguments presented above with respect to claim 1. Accordingly, it is respectfully requested that the rejection of claim 10 under 35 USC §112, first paragraph, be withdrawn.

Claims 2-4, 8-10 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

Claims 2, 3, 4, 8 and 9 have been amended to correct the lack of antecedent basis with respect to the claimed "destination address." No new subject matter has been introduced. As a result, Applicant requests that the Examiner withdraw this rejection.

Claim 4

Claim 4, as amended, is as follows:

4. The method of claim 2, wherein embedding information comprises embedding slot, port, virtual path identifier (VPI) and virtual channel identifier (VCI) for the permanent virtual circuit between the switch and the remote node in the destination address of the packet transmitted over the static connection.

In rejecting Claim 4, the Examiner indicates "it is not clear what is meant by the claimed 'embedding slot, port, virtual path identifier (VPI), virtual channel identifier for the permanent virtual circuit between ...' More specifically it is not clear what slot and port is referred to." (*see* Office Action, page 4)

It is respectfully submitted that one of ordinary skill in the art would understand that embedding slot, port, virtual path identifier (VPI) and virtual channel identifier (VCI) information for the permanent virtual circuit is necessary to set up and define a connection between switch 108 and node 106, as described with respect to Figure 1 of the present application. Furthermore, one of ordinary skill in the art would understand that the slot and port information embedded in the destination address correspond to the slot and port at switch 108 necessary for connecting with node 106. Accordingly, it is respectfully requested that the rejection of claim 4 under 35 USC §112, second paragraph, be withdrawn.

Claim 10

With respect to claim 10, Applicant assumes that the Examiner is indicating that claim 10 suffers from the same deficiencies as indicated in claim 4, not claim 10 as stated on page 4 of the Office Action. Applicant refers the Examiner to the arguments presented above with respect to

claim 4. Accordingly, it is respectfully requested that the rejection of claim 10 under 35 USC §112, second paragraph, be withdrawn.

With respect to claims 3, 8 and 9, Applicant refers the Examiner to the arguments presented above with respect to claim 4. Accordingly, it is respectfully requested that the rejection of claim 3, 8 and 9 under 35 USC §112, second paragraph, be withdrawn.

Rejections Under 35 U.S.C. § 103

Claims 1-10 are rejected under 35 USC § 103(a) as being unpatentable over Admitted Prior Art (APA) in view of Bosloy et al. (U.S. Patent No. 6,714,544), hereinafter referred to as Bosloy. Applicant respectfully traverses this rejection.

Claim 1

Claim 1 is as follows:

1. A method for establishing an end-to-end virtual circuit, the method comprising:

establishing a permanent virtual circuit between customer premises equipment and a digital subscriber line access multiplexer;

embedding information for a permanent virtual connection between a switch and a remote node in a packet transmitted over a static connection in a network; and

establishing a permanent virtual circuit between the switch and the remote node based on the embedded information.

(Emphasis added) It is respectfully submitted that the APA, at most, relates to the establishing of a switched virtual circuit between the DSLAM and the switch using any of a number of protocols. For example, the Office Action cites, among others, the following passage of the APA (which is found in paragraph [06]) in support of this rejection:

> The switched virtual circuit between the DSLAM and the switch is established using any of a number of protocols. One protocol includes the private network-network interface (PNNI) protocol. This protocol provides dynamic routing of SVCs through the network and is based on the open shortest path first (OSPF) protocol. PNNI allows routing to change dynamically based on current conditions in the network. However, the PNNI

> protocol is complicated and expensive and time consuming to implement. An alternative to PNNI is the interim inter-switch signaling protocol (IISP). IISP uses a static routing protocol that requires manual configuration of the routes through the network. However, IISP does not provide a mechanism for communicating the information necessary to establish the PVC at the switch connected to the ISP to provide end-to-end connectivity.

(Emphasis added) In other words, any connection taught in the APA relates to using a static routing protocol between a multiplexer [the DSLAM] and a switch and not for "a permanent virtual connection between a switch and a remote node" as recited in claim 1 of the present application. Further, the APA teaches away from using the PNNI protocol as indicated above.

The proposed combination with Bosloy does not remedy this since, even if the proposed combination is proper (which Applicant does not concede), such a proposed combination for the stated motivation teaches away from the APA. In contrast, Bosloy states "For signalling [sic – signaling] between the ATM nodes 434, 436, 438, 440 the PNNI signalling [sic – signaling] protocol is preferably used. It will be known to those skilled in the art that the use of PNNI signalling [sic – signaling] within the ATM network 412 provides for the establishment of S-PVCs [soft permanent virtual connections]." (*see* Bosloy, Col. 21, lines 24-28; emphasis added) and "In the preferred embodiment, the proxy SETUP message containing information identifying the endpoint channels is provided to the source ATM node 434 which extracts the information identifying the endpoint channels from the proxy SETUP message and generates a network SETUP message for requesting the establishment of an S-PVC according to the PNNI protocol." (*see* Bosloy, Col. 21, lines 35-42; emphasis added). Therefore, since the disclosure of Bosloy teaches away from the APA, the Examiner's stated motivation fails to provide a reason to combine the references. Accordingly, it is respectfully requested that the rejection of claim 1 be withdrawn.

Claims 2-4 ultimately depend from claim 1. Accordingly, it is respectfully requested that the rejection of these claims be withdrawn for at least the same reasons as claim 1.

Claim 5

Claim 5, as amended, is as follows:

5. A digital subscriber line access multiplexer, comprising:

at least one channel card coupled to at least one customer premises equipment over a communication line;

at least one line card, adapted to be coupled to a data network, the line card adapted to provide communication between the at least one customer premises equipment and a remote node coupled to the data network; and

wherein information for a permanent virtual connection between the remote node and a switch of the data network is embedded in a packet transmitted over a static connection in the data network between the at least one line card and the switch.

(Emphasis added) In rejecting claim 5, the Office Action stated that the APA "doesn't specify information for the permanent virtual connection between the switch and the ISP is embedded in a packet transmitted over the static connection between a line card and the switch, as in claim 5" (*See* Office Action, page 7) and "It would have been obvious to a person of ordinary [skill] in the art to reverse the sending of command signaling for establishing the permanent virtual circuit of that taught by Bosloy in the system of [the] APA for establishing the APA connection between the switch and the ISP so that end-to-end permanent virtual connection of APA can be realized between the switch and the ISP using command signaling content. The motivation would be the recognition of using available methods in establishing end-to-end virtual connections in the APA system." (*see* Office Action, page 8)

Even if Bosloy can be properly considered prior art, it is respectfully submitted that one of ordinary skill in the art would have no motivation to make the proposed combination. It is respectfully submitted that the arguments set forth above with respect to claim 1 apply to claim 5 as well. Accordingly, it is respectfully requested that the rejection of claim 5 be withdrawn.

Claims 6-9 ultimately depend from claim 7. Accordingly, it is respectfully requested that the rejection of these claims be withdrawn for at least the same reasons as claim 5.

Claim 10

Claim 10 was rejected using a similar proposed combination of APA and Bosloy with, apparently, the same motivation to combine the two references. It is respectfully submitted that the arguments set forth above with respect to claim 1 apply to claim 10 as well.

Accordingly, it is respectfully requested that the rejection of claim 10 be withdrawn.

CONCLUSION

Applicant respectfully submits that claims **1-14** are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at telephone number listed below.

Respectfully submitted,

Date: January 27, 2006

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